



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/077.005	07/10/98	WU	P62043050

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WASHINGTON DC 20004

EXAMINER GREEN, A

ART UNIT 1755	PAPER NUMBER
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DATE MAILED: 12/21/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/077,005

Applicant(s)
WU et al

Examiner
Anthony J. Green

Group Art Unit
1755



☒ Responsive to communication(s) filed on 10 Jul 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-28 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-28 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Specification

1. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because portions of the specification are blurred and unreadable.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one

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skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

No literal support can be seen in the specification for the phrase "strongly acidic" found in independent claims 1, 19 and 20.

It is unclear as to what is meant by the sentence "It is intended.....which follow the examples" which is found on page 20, lines 11-14 and accordingly when used to interpret the claims renders them unclear.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 the phrase "strongly acidic" is vague and indefinite as the phrase is a relative phrase. What is meant by "strongly acidic"? Clarification is requested. It is unclear as to the amount of each component present in the composition.

In claim 2 the phrase "including derivative" is unclear as it is unclear as to what material the phrase "including derivatives" refers to.

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In claims 3 and 4 the phrase "including hydrates" is unclear as it is unclear as to what material the phrase "including hydrates" refers to.

In claim 5 it is unclear as to what is meant by the phrase "is as a powder or a liquid". Is applicant trying to say that the material is in powder or liquid form? Clarification is requested.

Claim 7 is confusing as written. It is unclear as to how the amount can be based on pure calcium silicate when no calcium silicate is present in the composition. Clarification is requested.

In claim 9 the phrase "the whole water content" lacks proper antecedent basis. It is unclear as to how the amount can be based on pure calcium silicate when no calcium silicate is present in the composition. Clarification is requested.

In claim 11 it is unclear as to how the amount can be based on pure calcium silicate when no calcium silicate is present in the composition. Clarification is requested.

In claim 13 the phrases "the particle size" and "the aspect ratio" lacks proper antecedent basis.

In claim 14 it is unclear as to the amount of additives that may be utilized. The use of the phrase "such as" renders the claim vague and indefinite as it is unclear whether the limitations following the phrase are part of the claimed invention and the scope of the claim is unascertainable. See MPEP § 2173.05(d).

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In claim 15 "stereate" should be -- stearate --.

Claim 16 contains improper Markush terminology. It is unclear as to whether or not the phrase "or a combination thereof" refers to using a mixture of carbonate compounds or that the carbonate compound can be used in a mixture of powder and aqueous solution form.

Clarification is requested.

In claim 18 the use of the phrase "including glass fibre" renders the claim vague and indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention and the scope of the claim is unascertainable. See MPEP § 2173.05(d).

The preamble of claim 19 is inconsistent with that of claim 1 as claim 1 is not drawn to a process. In claim 19 the phrase "strongly acidic" is vague and indefinite as the phrase is a relative phrase. What is meant by "strongly acidic"? Clarification is requested. It is unclear as to the amount of each component present in the composition. The extensive use of "and/or" in describing the materials renders the claim confusing. The use of the phrase "including hydrates and derivatives thereof" renders the claim vague and indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention and the scope of the claim is unascertainable. See MPEP § 2173.05(d).

The preamble of claim 20 is inconsistent with that of claim 1 as claim 1 is not drawn to a process. The phrase "said additives" lacks proper antecedent basis as there are no additives recited in claim 1. The phrase "capable of" is not a positive claim recitation.

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In claim 21 the preamble is inconsistent with that of claim 1 as claim 1 is not drawn to a process. The phrase "said additives" lacks proper antecedent basis as there are no additives recited in claim 1. It is unclear as to what fibres applicant is referring to when no fibres are specifically recited in claim 1. The phrase "which is called prepreg" renders the claim confusing. The phrase "capable of" is not a positive claim recitation.

Claims 26-28 are confusing as written as it is unclear as to how the composition is used as there are no active method steps recited.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 26-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to "Use of" which is not a statutory category of invention.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-12, 14, 16-17, 20-22 and 25-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over German Patent Specification No. 2356524.

The reference teaches a product comprising a phosphate, an oxy-boron compound and wollastonite. Claims 1, 2, 5 and 6 of the reference teach an aqueous dispersion comprising a 30-50% solution of phosphates and silicate materials such as wollastonite. Page 3, line 29 teaches that the phosphate may be selected from aluminum phosphate. Page 6, lines 13-15 teach the use of NaPO_3 which has a pH of 6 in a 1% aqueous solution. Claim 4 teaches that a pigment may also be present in the composition. Page 6, 2nd paragraph teaches the use of sodium carbonate which acts as a foaming agent. Page 9, 2nd paragraph teaches the use of the binder to produce shaped bodies.

No significant differences can be seen between the instant claims and the reference.

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11. Claims 13, 15, 18, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent Specification No. 2356524.

As for the properties of the wollastonite, the type of surfactant, fiber etc these appear to be matters of obvious choice or design best determinable through routine experimentation and optimization within the art and producing no unexpected results absent a showing otherwise. The use of silica or fibers as filler or reinforcement materials appears to be an entirely conventional measure in the art. Zinc stearate is known in the art as a conventional surfactant. As for the particles sizes and aspect ratio of the wollastonite it appears obvious that fibrous wollastonite has better reinforcement capabilities and is thus preferred. Accordingly the claims are obvious over the reference.

12. Claim 19 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Great Britain Patent Specification No. 2100246.

The reference teaches, in the examples, a process for producing phosphate ceramic materials which appear to encompass that which is taught in instant claim 19.

No significant differences can be seen between the instant claims and the reference. While the reference does not specifically teach the formation of an "at least semi-transparent solution" this appears to be an inevitable result as the process encompasses that which is instantly claimed.

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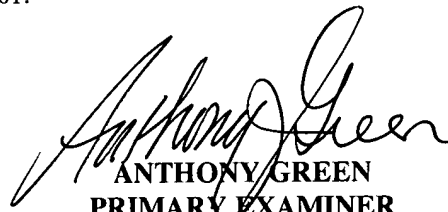
Information Disclosure Statement

13. The remaining references cited by applicants have been considered, however they are not seen to teach or fairly suggest the instant invention.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Green whose telephone number is (703) 308-3819. The examiner can normally be reached on Monday - Thursday and alternate Fridays from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached on (703) 308-3823. The fax phone number for this Group is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.


ANTHONY GREEN
PRIMARY EXAMINER
ART UNIT 1755

ajg
December 18, 1998